·	Application No.	Applicant(s)
Notice of Allowability	10/080,690	OHTA, YOSHINORI
	Examiner	Art Unit
	Aung S. Moe	2685
The MAILING DATE of this communication apperall claims being allowable, PROSECUTION ON THE MERITS IS (herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT Re	OR REMAINS) CLOSED or other appropriate comm GHTS. This application is	n this application. If not included unication will be mailed in due course. THIS
1. \boxtimes This communication is responsive to <u>the communication file</u>	ed on 7/25/2005.	
2. The allowed claim(s) is/are 1-8 (renumbered as 1-8).		
3. \boxtimes The drawings filed on <u>25 February 2002</u> are accepted by th	e Examiner.	
4.	been received. been received in Application and the summents have been received of this communication to fill ENT of this application. Itted. Note the attached EX is reason(s) why the oath of the submitted. It be submitted. It is a point of this application. It is a point of this application.	on No. 08/900,118. ed in this national stage application from the ear reply complying with the requirements AMINER'S AMENDMENT or NOTICE OF or declaration is deficient. W (PTO-948) attached or in the Office action of the drawings in the front (not the back) of FR 1.121(d). ERIAL must be submitted. Note the
Attachment(s) 1. ☑ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☑ Information Disclosure Statements (PTO-1449 or PTO/SB/08 Paper No./Mail Date see attached 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	6. ☐ Interview S Paper No 3), 7. ☐ Examiner's	Informal Patent Application (PTO-152) Summary (PTO-413), /Mail Date S Amendment/Comment S Statement of Reasons for Allowance Aung S. Moe Primary Examiner Art Unit: 2685

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Election/Restrictions

1. Applicant's election of Species of Fig. 2 and claims 1-4 in the reply filed on 7/25/2005 is acknowledged. However, upon carefully review of this case, it is noted that claims 1-8 are directed to same invention as shown in Fig. 7 of the instant application. In view of this, the restriction requirement as to the encompassed species is hereby withdrawn.

In view of the above noted withdrawal of the restriction requirement, applicant(s) are advised that if any claim(s) depending from or including all the limitations of the allowable claim(s) be presented in a continuation or divisional application, such claims may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Once a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 44 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

Allowable Subject Matter

2. The following is an examiner's statement of reasons for allowance:

Regarding claims 1 and 3, it is noted that claims 1 and 3 (renumbered as claims 1 and 2) are considered allowable over the prior art of record since prior art of record fails to show or fairly suggest an automatic focusing device for a film scanner having a zoom lens as an imaging lens for projecting an image recorded on photo film onto an image sensor, and containing a film type identifier for identifying film type of the photo film; a focus-scan range definer for defining a focus-scan range in accordance with the identified film type; a sampler for sampling pixel signals from the image sensor at different focusing positions within the focus-scan range of the

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imaging lens; a programmable digital band pass filter for producing evaluation signals and the frequency band is modified in cooperation with zooming of the imaging lens; an integrator for obtaining an integration value of the extracted evaluation signals at one focusing position; and a controller for controlling the focusing position of the imaging lens based on the integration values obtained at different focusing positions as substantially described and connected in independent claim 1.

Regarding claim 2 and 4 (renumbered as 3 and 4), it is noted that claims 2 and 4 are considered allowable over the prior art of record since prior art of record fails to show or fairly suggest an automatic focusing device for a film scanner having a zoom lens as an imaging lens for projecting an image recorded on photo film onto an image sensor, the device further including a lens driving mechanism; a lens position detector; a film type identifier for identifying film type of the photo film; a focus-scan range definer for defining a focus-scan range in accordance with the identified film type; a sampler for sampling pixel signals from the image sensor at different focusing positions within the focus-scan range of the imaging lens; programmable digital band pass filter for producing evaluation signals from the pixel signals with adjustable frequency band, and for extracting those evaluation signals within a given frequency band; a data memory storing set values for the frequency band of the band pass filter with reference to the data memory in accordance with the zooming position detected by the lens position detecting means; an integrator for obtaining an integration value; a peak detector for detecting a peak value of the integration values obtained at the different focusing positions; and a controller for controlling the lens driving mechanism to set the imaging lens at a focusing

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position where the peak value is obtained as substantially described and connected in independent claim 2.

Regarding claims 5-8, it is noted that claims 5, 6, 7 and 8 (renumbered as 5-8) are considered allowable over the prior art of record since prior art of record fails to show or fairly suggest an automatic focusing device for a film scanner having a zoom lens, a frame size designator for designating an effective image area on the photo film based on at least one of a user input and information recorded on the photo film; an evaluation area definer for defining an evaluation area on the image sensor in accordance with the designated effective image area; a sampler for sampling pixel signals from the image sensor at different focusing positions of the imaging lens, the sampler further including a film type identifier for identifying film type of the photo film, and a focus-scan range definer for defining a focus-scan range in accordance with the identified film type, wherein the different focusing positions at which pixel signals are sampled are within the focus-scan range; an evaluation signals producer being correlative with spatial frequencies of the effective image area; an integrator; a controller for controlling the focusing position of the imaging lens based on the integration values obtained at the different focusing positions; and a zooming position detector for detecting a position of the zooming lens, wherein the evaluation area definer defines the evaluation area in accordance with the effective imaging area and the position of the zooming lens positions as substantially described and connected in independent claim 5.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

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fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for

Allowance."

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure. Following prior arts show a film scanning system and the camera system having a

focus control system therein:

JP 04-046471 (Translated)

6,434,339

5,568,273

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5,486,895

5,852,503

EP 0,180,186

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aung S. Moe whose telephone number is 571-272-7314. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward F. Urban can be reached on 571-272-7899. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ung S. Moe

(Primary Examiner

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A. Moe

August 2, 2005